

Atmospheric conditions during solar radiation measurements. Blue Hill Observatory of Harvard University

Date and time from apparent noon	Air temperature	Wind Beaufort scale	Visibility (scale 0-10)	Sky-blue-ness	Cloudiness and remarks
<i>June 1935</i>					
1; 4:08 p. m.	13.9	NNE 4	8-9	10	3 Acu, few Cu.
2; 3:18 a. m.	16.7	NE 4	9	10	Few Cu.
2; 0:33 a. m.	19.4	E 3	8-9	10	Few Ci, 1 Cu, light haze.
2; 2:35 p. m.	20.0	NE 3	9	9	3 Ci, few Cu.
7; 3:18 a. m.	16.1	W 2	6	7	3 Ci, light fog and heavy water haze.
7; 2:22 p. m.	22.8	S 5	8	7	2 Acu, 3 Cu, heavy water haze.
7; 4:00 p. m.	21.7	S 5	8	8	Few Ci, few Cu, heavy water haze
12; 3:27 a. m.	18.9	SW 2	7	6	5 Acu, Cu, Stcu, mod. water haze.
12; 0:45 a. m.	23.3	W 3	7	6	Few Acu, few Cu, mod. water haze.
12; 3:04 p. m.	23.3	W 5	8	9	3 Cu, mod. water haze.
13; 3:17 a. m.	19.4	W 1	7	9	3 Acu, few Cu, heavy water haze.
13; 0:38 a. m.	28.9	S 2	8	7	5 Cu, heavy water haze.
13; 2:27 p. m.	28.9	WNW 3	8	7	6 Cu, mod. water haze.
13; 4:23 p. m.	27.2	W 3	8	9	3 Cu, light water haze.
17; 3:15 a. m.	21.1	SW 5	8	8	10 Cist, very thin, mod. haze.
22; 3:13 a. m.	22.2	S 5	8	8	6 Acu Cu, light water haze.
23; 4:41 a. m.	15.6	W 4	8	10	Few Acu, light haze.
23; 3:15 a. m.	21.7	W 3	8	9	1 Acu, light haze.
23; 2:36 p. m.	25.0	SW 4	8	8	2 Acu, 3 Cu, light haze.
24; 3:19 a. m.	18.3	WNW 4	8	10	Few Ci, few Cu, light haze.
24; 0:36 a. m.	26.1	W 3	8	9	Few Ci, 6 Cu, light haze.
27; 3:16 a. m.	21.7	S 3	8	9	1 Ci, 2 Acu, heavy haze.
27; 0:01 p. m.	26.1	S 4	8	8	3 Ci, 3 Cu, mod. haze.
27; 2:55 p. m.	26.1	S 6	8	7	3 Ci, mod. haze.
28; 3:18 a. m.	21.7	W 1	7	9	4 Ci, mod. haze.
28; 0:35 a. m.	27.2	N 2	8	9	4 Ci, few Cu, light haze.
30; 3:22 a. m.	22.2	SSW 3	7-8	9	No clouds, heavy haze.
30; 2:20 p. m.	28.9	W 4	8	6	6 Cu, light haze.

POSITIONS AND AREAS OF SUN SPOTS

[Communicated by Capt. J. F. Hellweg, U. S. Navy, Superintendent U. S. Naval Observatory. Data furnished by the U. S. Naval Observatory in cooperation with Harvard and Mount Wilson Observatories. The difference in longitude is measure from the central meridian, positive west. The north latitude is positive. Areas are corrected for foreshortening and are expressed in millionths of the sun's visible hemisphere. The total area for each day includes spots and groups]

Date	Eastern stand-ard time	Heliographic			Area		Total area for each day	Observatory
		Diff. in longi-tude	Longi-tude	Lat-i-tude	Spot	Group		
1935	<i>h. m.</i>	<i>°</i>	<i>°</i>	<i>°</i>				
June 1	11 15	-44.0	275.8	+26.0		62	247	U. S. Naval.
June 2	10 36	-8.0	311.8	-30.5		185		Do.
June 3	12 40	-31.0	276.0	+27.0		62		Mount Wil-son.
		+6.0	313.0	-30.5	17	340		
June 4	12 15	-21.0	271.5	+28.0				Do.
		+20.0	312.5	-30.0		691	708	
		-87.0	192.6	+28.0	100			
		-8.0	271.6	+27.0	4			
		+31.0	310.6	-30.0		496		
		+80.0	359.6	-26.0	18		618	
June 5	11 4	-70.0	197.0	+28.0		62	402	U. S. Naval.
		+46.0	313.0	-31.0		340		
June 6	11 39	-59.0	194.5	+29.0		85		Do.
		+58.0	311.5	-31.0		278	363	
June 7	11 3	-48.0	192.5	+29.0		62		Do.
		+70.0	310.5	-31.5		247	309	
June 8	12 55	-64.0	162.2	-27.0		66		Mount Wil-son.
		-49.0	177.2	+28.5		11		
		-32.0	194.2	+28.0	100			
		-19.0	207.2	-32.0		109		
		+85.0	311.2	-30.0		40	326	
June 9	14 1	-44.0	168.4	-26.0		77		U. S. Naval.
		-41.5	170.9	-36.0		31		
		-18.0	194.4	+29.0		69		
		-4.0	208.4	-31.5		247	424	
June 10	11 38	-30.0	170.5	-26.0		46		Do.
		-30.5	170.0	-35.0		39		
		-25.0	175.5	+27.0		39		
		-20.0	180.5	+26.0	15			
		-8.0	192.5	+28.5		39		
		+9.0	209.5	-31.0		247	425	
June 11	12 0	-54.0	133.1	+29.0		86		Mount Wil-son.
		-19.0	168.1	-25.0		8		
		-19.0	168.1	-35.0		41		
		-5.0	182.1	+27.0	4			
		+9.0	196.1	+28.0	8			
		+22.0	209.1	-32.0		205	352	
June 12	11 0	-42.0	132.4	+30.0		62		U. S. Naval.
		+4.5	178.9	+28.0		62		
		+35.0	209.4	-30.5		154	278	
June 13	11 10	-29.0	132.1	+29.5		93		Do.
		+18.0	179.1	+28.0		69		
		+46.0	207.1	-30.0		62	224	

POSITIONS AND AREAS OF SUN SPOTS—Continued

Date	Eastern stand-ard time	Heliographic			Area		Total area for each day	Observatory
		Diff. in longi-tude	Longi-tude	Lat-i-tude	Spot	Group		
1935	<i>h. m.</i>	<i>°</i>	<i>°</i>	<i>°</i>				
June 14	11 9	-17.5	130.3	+29.5		93		U. S. Naval.
		+37.0	184.8	+27.0	31			
		+60.0	207.8	-30.0		46	170	
June 15	10 36	-71.0	63.9	-20.0	93			Do.
		-63.0	71.9	+16.0		62		
		-5.0	129.9	+29.5		31		
		+43.0	182.9	+27.0	8		225	
		+70.0	204.9	-31.0		139		
June 16	12 54	-64.0	56.4	-19.0	46			Do.
		-43.0	77.4	+15.0	23			
		+9.0	129.4	+29.5		93	301	
		+61.0	181.4	+27.0	31			Do.
June 17	11 7	-86.0	22.1	-19.0		108		
		-51.0	57.1	-19.0		31		
		-29.5	78.6	+15.0		260		
		+69.5	177.6	+27.5	46		216	
June 18	11 12	-70.0	24.9	-19.5	93			Do.
		-36.0	58.9	-19.5		123		
		-14.0	80.9	+14.0	31		247	
June 19	12 0	-59.0	22.2	-19.5	226			Mount Wil-son.
		-25.0	56.2	-19.0		39	525	
		-2.0	79.2	+15.0		123		U. S. Naval.
June 20	11 8	-44.5	23.9	-19.0		31		
		-17.5	50.9	-17.5		123		
		-10.0	58.4	-19.5		31	308	
June 21	8 45	+10.5	78.9	+15.0		249		Mount Wil-son.
		-69.5	357.0	-28.0	8			
		-31.0	25.5	-19.5		54		
		-1.0	55.5	-17.0		18	333	
		+25.0	81.5	+15.0	4			
		+59.5	116.0	+31.0		123		U. S. Naval.
June 22	11 0	-18.0	24.0	-19.5		31	154	
		+47.0	89.0	+15.0	154			Do.
June 23	10 58	-80.0	308.8	-24.5	154			
		-5.0	23.8	-19.5	10		318	
		-6.0	22.8	-20.0		432		Do.
June 24	11 12	-69.0	306.4	-26.0		123	555	
		+8.5	23.9	-19.5		31		Do.
June 25	11 11	-61.0	301.2	-30.0		586		
		-55.0	307.2	-24.5	123		740	
		+22.0	24.2	-19.5		39		Do.
June 26	11 8	-49.0	300.0	-31.0		648		
		-42.0	307.0	-25.0		139	826	
		+35.0	24.0	-19.5		39		Do.
June 27	11 4	-37.5	298.3	-31.0		617		
		-30.0	305.8	-24.5		139	795	
		+49.0	24.8	-19.5		62		Do.
June 28	11 4	-23.0	299.6	-30.5		93		
		-21.0	301.6	-22.0		617		
		-16.0	306.6	-24.0	123		895	
		+61.0	23.6	-19.5		31		Do.
June 29	10 37	-10.5	299.1	-31.0		93		
		-9.0	300.6	-22.0		556		
		-4.0	305.6	-24.0		30	749	
June 30	13 0	+73.0	22.6	-19.5		956		Mount Wil-son.
		+3.0	298.0	-29.0				
		+11.0	306.0	-24.0			986	
Mean daily area for 30 days.							447	

PROVISIONAL SUN-SPOT RELATIVE NUMBERS FOR JUNE 1935

[Dependent alone on observations at Zurich and its station at Arosa]

[Data furnished through the courtesy of Prof. W. Brunner, Eidgen, Sternwarte, Zurich, Switzerland]

June 1935	Relative numbers	June 1935	Relative numbers	June 1935	Relative numbers
1	34	11	Ec 74	21	50
2	b 39	12	66	22	a 35
3	34	13	55	23	d 29
4	34	14	41	24	a 38
5	d 31	15	d 49	25	44
6	41	16	42	26	51
7	25	17	38	27	56
8	Ec 46	18	d 41	28	52
9	Ec 60	19	38	29	45
10	b 73	20	67	30	b 42

Mean, 30 days=45.7.

a= Passage of an average-sized group through the central meridian.
b= Passage of a large group or spot through the central meridian.
c= New formation of a center of activity; E, on the eastern part of the sun's disk; W, on the western part; M, in the central circle zone.
d= Entrance of a large or average-sized center of activity on the east limb.